

## REMARKS

Applicants have amended their claims herein to better clarify the invention. Claims 1, 10, and 19, are amended herein to recite, *inter alia*, supplying a plurality of host computers, wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval system. Support can be found in the Specification on Page 6 at Lines 14-18.

Claims 1, 10, and 19, are further amended herein to recite supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters. Support can be in the Specification on Page 12 at Lines 17-22, and Page 16 at Lines 6-7.

Claims 1, 10, and 19, are further amended herein to recite supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises, a plurality of data storage devices. Support can be in the Specification on Page 7 at Lines 3-5, Page 8 at Lines 20-22, Page 10 at Lines 14-16, Page 14 at Lines 15-17, and Page 16 at Lines 13-14.

Claims 1, 10, and 19, are further amended herein to recite supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a processor. Support can be in the Specification on Page 13 at Lines 1-4, and Page 13 at Lines 10-13.

Claims 1, 10, and 19, are further amended herein to recite supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a data cache. Support can be in the Specification on Page 13 at Lines 4-9, and Page 13 at Lines 13-

18.

No new matter has been entered. Reexamination and reconsideration of the application, as amended, is respectfully requested.

Claims 1, 10, and 19, stand rejected on the grounds of nonstatutory obviousness-type double patenting as being obvious over claims 1 and 11 of Dan et al. (U.S. Pat. No. 6,047,309). Dan et al. fails to teach supplying a plurality of host computers, wherein a different one of said plurality of control nodes is disposed in each of said plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 1, 10, and 19, as amended herein. Dan et al. further fails to teach supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 1, 10, and 19, as amended herein. This being the case, Applicants respectfully submit that claims 1, 10, and 19, as amended herein, are non-obvious over the teachings of Dan et al.

Claims 1, 10, and 19, stand rejected on the grounds of nonstatutory obviousness-type double patenting as being obvious over claims 1 and 2 of Emens et al. (U.S. Pat. No. 6,606,643). Emens et al. fails to teach supplying a plurality of host computers, wherein a different one of said plurality of control nodes is disposed in each of said plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 1, 10, and 19, as amended herein. Emens et al. further fails to teach supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system

comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 1, 10, and 19, as amended herein. This being the case, Applicants respectfully submit that claims 1, 10, and 19, as amended herein, are non-obvious over the teachings of Emens et al.

Claims 1, 5, 10, 14, 19, and 23, stand rejected under 35 USC 102(b) as being anticipated by Kenner et al. (U.S. Pat. No. 6,112,239). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.Cir. 1987); MPEP 2131. Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed.Cir. 1989).

Kenner et al. fails to teach supplying a plurality of host computers, wherein a different one of a plurality of control nodes is disposed in each of the plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 1, 10, and 19, as amended herein. Kenner et al. fails to teach supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 1, 10, and 19, as amended herein. Kenner et al. fails to teach designating one control node as the captain control node to coordinate the operations of the plurality of host computers, as recited in Applicants' claims 1, 10, and 19, as amended herein. This being the case, Applicants respectfully submit that claims 1, 10, and 19, as amended herein, are patentable over

the teachings of Kenner et al.

Claims 5, and 7-9, as amended herein, depend, directly or indirectly, from claim 1, as amended herein. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Applicants respectfully submit that claim 5, as amended herein, are patentable over the teachings of Kenner et al.

Claim 14, as amended herein, depend, directly or indirectly, from claim 10, as amended herein. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Applicants respectfully submit that claim 14, as amended herein, are patentable over the teachings of Kenner et al.

Claim 23, as amended herein, depends from claim 19, as amended herein. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Applicants respectfully submit that claim 23, as amended herein, is patentable over the teachings of Kenner et al.

Claims 3 and 12, stand rejected under 35 USC 103(a) as being unpatentable over Kenner et al. (U.S. Pub. No. 2003/0004177) in view of Conrad et al (U.S. Pub. No. 2002/0156878). The Supreme Court recently addressed the issue of obviousness in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007). The Court held that the *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966), factors still control an obviousness inquiry. Those factors include "the scope and

content of the prior art" and the "differences between the prior art and the claims". *KSR*, 127 S. Ct. at 1734 (quoting *Graham*, 383 U.S. at 17-18).

Neither Kenner et al. nor Conrad et al., singly or in combination, teach or suggest supplying a plurality of host computers, wherein a different one of a plurality of control nodes is disposed in each of the plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 3 and 12, as amended herein. Neither Kenner et al. nor Conrad et al., singly or in combination, teach or suggest supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 3 and 12, as amended herein. Neither Kenner et al. nor Conrad et al., singly or in combination, teach or suggest designating one control node as the captain control node to coordinate the operations of the plurality of host computers, as recited in Applicants' claims 3 and 12, as amended herein. In view of the scope and content of the prior art, and the differences between the prior art and the claims, Applicants respectfully submit that claims 3 and 12, as amended herein, are patentable over the teachings of Kenner et al. in view of Conrad et al.

Claims 2, 11, and 20, stand rejected under 35 USC 103(a) as being unpatentable over Kenner et al. (U.S. Pub. No. 2003/0004177) in view of Rehkopf et al (U.S. Pat. No. 6,505,249). The Supreme Court recently addressed the issue of obviousness in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007). The Court held that the *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966), factors still

control an obviousness inquiry. Those factors include "the scope and content of the prior art" and the "differences between the prior art and the claims". *KSR*, 127 S. Ct. at 1734 (quoting *Graham*, 383 U.S. at 17-18).

Neither Kenner et al. nor Rehkopf et al., singly or in combination, teach or suggest supplying a plurality of host computers, wherein a different one of a plurality of control nodes is disposed in each of the plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 2, 11, and 20, as amended herein. Neither Kenner et al. nor Rehkopf et al., singly or in combination, teach or suggest supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 2, 11, and 20, as amended herein. Neither Kenner et al. nor Rehkopf et al., singly or in combination, teach or suggest designating one control node as the captain control node to coordinate the operations of the plurality of host computers, as recited in Applicants' claims 2, 11, and 20, as amended herein. In view of the scope and content of the prior art, and the differences between the prior art and the claims, Applicants respectfully submit that claims 2, 11, and 20, as amended herein, are patentable over the teachings of Kenner et al. in view of Rehkopf et al.

Claims 4, 13, and 22, stand rejected under 35 USC 103(a) as being unpatentable over Kenner et al. in view of Conrad et al. and Rehkopf et al. The Supreme Court recently addressed the issue of obviousness in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007). The Court held that the *Graham v. John Deere Co. of Kansas City*,

383 U.S. 1, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966), factors still control an obviousness inquiry. Those factors include "the scope and content of the prior art" and the "differences between the prior art and the claims". *KSR*, 127 S. Ct. at 1734 (quoting *Graham*, 383 U.S. at 17-18).

Neither Kenner et al. nor Conrad et al., nor Rehkopf et al., singly or in combination, teach or suggest supplying a plurality of host computers, wherein a different one of a plurality of control nodes is disposed in each of the plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 4, 13, and 22,, as amended herein. Neither Kenner et al. nor Conrad et al., nor Rehkopf et al., singly or in combination, teach or suggest supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 4, 13, and 22,, as amended herein. Neither Kenner et al. nor Conrad et al., nor Rehkopf et al., singly or in combination, teach or suggest designating one control node as the captain control node to coordinate the operations of the plurality of host computers, as recited in Applicants' claims 4, 13, and 22, as amended herein. In view of the scope and content of the prior art, and the differences between the prior art and the claims, Applicants respectfully submit that claims 4, 13, and 22, as amended herein, are patentable over the teachings of Kenner et al. in view of Conrad et al. and Rehkopf et al.,

Claims 6, 15, and 24, stand rejected under 35 USC 103(a) as being unpatentable over Kenner et al. The Supreme Court recently addressed the issue of obviousness in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 167 L. Ed. 2d 705 (2007). The Court held

that the *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966), factors still control an obviousness inquiry. Those factors include "the scope and content of the prior art" and the "differences between the prior art and the claims". *KSR*, 127 S. Ct. at 1734 (quoting *Graham*, 383 U.S. at 17-18).

Kenner et al. fails to teach or suggest supplying a plurality of host computers, wherein a different one of a plurality of control nodes is disposed in each of the plurality of host computers, and wherein each host computer comprises a storage management program to manage the transfer of data to data storage and retrieval systems, as recited in Applicants' claims 6, 15, and 24, as amended herein. Kenner et al. fails to teach or suggest supplying a plurality of data storage and retrieval systems, wherein each data storage and retrieval system comprises a plurality of host adapters, a plurality of data storage devices, a processor, and a data cache, as recited in Applicants' claims 6, 15, and 24, as amended herein. Kenner et al. fails to teach or suggest designating one control node as the captain control node to coordinate the operations of the plurality of host computers, as recited in Applicants' claims 6, 15, and 24, as amended herein. This being the case, Applicants respectfully submit that claims 6, 15, and 24, as amended herein, are patentable over the teachings of Kenner et al.



Having dealt with all of the outstanding objections and/or rejections of the claims, Applicants submit that the application as amended is in condition for allowance, and an allowance at an early date is respectfully solicited. In the event there are any fee deficiencies or additional fees are payable, please charge them, or credit an overpayment, to our Deposit Account No. 502262.

Respectfully submitted,

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